

IN THE CLAIMS:

Please amend Claims 1 and 12-15 as follows.

1. (Currently Amended) An image processing method for creating bit-map data and attribute information for each pixel formed of at least two object bits each representing different types of objects a given pixel will display and an inversion bit representing an inversion attribute and corresponding to the bit-map data by expanding a rendering command, said image processing method comprising:

an operation determining step of determining the type of operation to be performed on the attribute information based on logical operation processing specified for the rendering command;

a logical operation processing creating step of creating the logical operation processing for the attribute information based on the determined type of operation;

a logical operation processing step of creating the attribute information formed of at least two object bits each representing different types of objects a given pixel will display and an inversion bit representing an inversion attribute by executing the logical operation processing so that the bit pattern represented by the attribute information has all of the bits turned off, has only one object bit turned on, has only one object bit turned off, or has all of the bits turned on; and

an inversion step of inverting the attribute information when only one ~~the attribute information possesses an inversion attribute.~~ object bit is turned off or when all of the bits are turned on the attribute information possesses an inversion attribute.

2. (Previously Presented) An image processing method according to claim 1, wherein the attribute information comprises information indicating the attribute and the inversion attribute possessed by the rendering command.

3. (Previously Presented) An image processing method according to claim 2, wherein each of the attributes and the inversion attribute of the attribute information has one bit.

4. (Previously Presented) An image processing method according to claim 2, wherein the attribute possessed by the rendering command indicates the type of object.

5. (Previously Presented) An image processing method according to claim 1, wherein said operation determining step comprises:

an analysis step of analyzing the logical operation processing specified for the rendering command;

a target-attribute operation determining step of determining a target-attribute operation corresponding to the attribute possessed by the rendering command based on a result obtained in said analysis step; and

a non-target-attribute operation determining step of determining a non-target attribute operation corresponding to an attribute other than the attribute possessed by the rendering command based on the target-attribute operation.

6. (Previously Presented) An image processing method according to claim 5, wherein said target-attribute operation determining step determines the target-attribute operation based on the logical operation processing specified for the rendering command and color information of a pattern on which the logical operation processing is to be performed.

7. (Previously Presented) An image processing method according to claim 1, wherein, when the logical operation processing is not specified for the rendering command, said operation determining step determines the type of operation to be performed on the attribute information by assuming that the logical operation processing indicates an overwriting operation.

8. (Previously Presented) An image processing method according to claim 1, further comprising a source creating step of creating a source and a pattern for the attribute information based on the rendering command, wherein said logical operation processing

step executes the logical operation processing based on the source and the pattern for the attribute information.

9. (Previously Presented) An image processing method according to claim 8, wherein the attribute information created in said logical operation processing step has a result similar to a result obtained by performing the operation determined in said operation determining step on the source for the attribute information.

10. (Previously Presented) An image processing method according to claim 1, wherein the bit-map data is multi-level bit-map data.

11. (Previously Presented) An image processing method according to claim 1, further comprising a color processing step of performing color processing for each pixel of the bit-map data expanded from the rendering command based on the attribute information obtained in said inversion step.

12. (Currently Amended) An image processing apparatus for creating bit-map data and attribute information for each pixel formed of at least two objects bits each representing different types of objects a given pixel will display an inversion bit representing an inversion attribute and corresponding to the bit-map data by expanding a rendering command, said image processing apparatus comprising:

operation determining means for determining the type of operation to be performed on the attribute information based on logical operation processing specified for the rendering command;

logical operation processing creating means for creating the logical operation processing for the attribute information based on the determined type of operation;

logical operation processing means for creating the attribute information formed of at least two objects bits each representing different types of objects a given pixel will display and an inversion bit representing an inversion attribute by executing the logical operation processing so that the bit pattern represented by the attribute information has all of the bits turned off, has only one object bit turned on, has only one object bit turned off, or has all of the bits turned on;

inversion means for inverting the attribute information when only one object bit is turned on the attribute information possesses an inversion attribute; and

color processing means for performing color processing on the bit-map data based on the attribute information.

13. (Currently Amended) An image processing system comprising an image processing apparatus and an image forming apparatus connected to each other, said image processing apparatus comprising:
bit-map creating means for creating bit-map data by expanding a rendering command;

attribute-information creating means for creating attribute information for each pixel formed of at least two object bits each representing different types of objects a given pixel will display and an inversion bit representing an inversion attribute and corresponding to the bit-map data;

color processing means for performing color processing on the bit-map data based on the attribute information; and

output means for outputting the color-processed bit-map data to said image forming apparatus,

said attribute-information creating means comprising:

operation determining means for determining the type of operation to be performed on the attribute information based on logical operation processing specified for the rendering command;

logical operation processing creating means for creating the logical operation processing for the attribute information based on the determined type of operation;

logical operation processing means for creating the attribute information formed of at least two object bits each representing different types of objects a given pixel will display and an inversion bit representing an inversion attribute by executing the logical operation processing so that the bit pattern represented by the attribute information has all of the bits turned off, has only one object bit turned on, has only one object bit turned off, or has all of the bits turned on; and

inversion means for inverting the attribute information when only one object bit is turned off or when all of the bits are turned on ~~the attribute information possesses an inversion attribute.~~

14. (Currently Amended) A control program embodied in a computer-readable medium for performing image processing for creating bit-map data and attribute information for each pixel formed of at least two object bits each representing different types of objects a given pixel will display and an inversion bit representing an inversion attribute and corresponding to the bit-map data by expanding a rendering command, said control program comprising:

an operation determining step code for determining the type of operation to be performed on the attribute information based on logical operation processing specified for the rendering command;

a logical operation processing creating step code for creating the logical operation processing for the attribute information based on the determined type of operation;

a logical operation processing step code for creating the attribute information formed of at least two object bits each representing different types of objects a given pixel will display and an inversion bit representing an inversion attribute by executing the logical operation processing so that the bit pattern represented by the attribute information has all of the bits turned off, has only one object bit turned on, has only one object bit turned off, or has all of the bits turned on; and

an inversion step code for inverting the attribute information when only
one object bit is turned off or when all of the bits are turned on the attribute information
possesses an inversion attribute.

15. (Currently Amended) A computer-readable recording medium in
which the control program set forth in claim 14 is recorded embodied.